CLAIMS

1. (Previously Presented) A computer implemented method for assisting a user in the control and operation of a computer system, the computer system having a display device, the computer system providing information content for display, such information content potentially containing more content such as characters, pictures, lines, or pixels than can be conveniently displayed entirely on the display device at one time, comprising:

   coupling a display device to a computer system;

   mapping the information content generated by the computer system into a virtual desktop suitable for conveying the information content to the user;

   displaying a certain portion of the virtual desktop using the computer system's display device;

   tracking translational movements of the display device; and

   adjusting the displayed certain portion of the virtual desktop in a manner related to the tracked movements of the display device by which the user is able to traverse the entire information content mapped to the virtual desktop and examine any certain portion or segment of the information content using the computer system's display device.

2.   (Previously Presented) A computer implemented method as recited in claim 1 wherein a virtual magnification of the displayed certain portion is updated in a manner correlated to the tracked movements of the display device.

3.   (Original) A computer implemented method as recited in claim 1 wherein a virtual magnification of the displayed certain portion is updated in response to a command entered into the computer system by a user of the computer system.

4.   (Original) A computer implemented method as recited in claim 1 further comprising the act of redefining the orientation of the certain portion displayed via the display device such that, without moving the display device, the certain portion displayed via the display device changes.

5.   (Original) A computer implemented method as recited in claim 4 wherein the orientation of the certain portion displayed is redefined in response to a request by a user.

6.   (Original) A computer implemented method as recited in claim 1 wherein a first application executing upon the computer system is a physical map application providing a virtual map, the movement of the display device enabling visual navigation through the virtual map.

7.   (Original) A computer implemented method as recited in claim 6 wherein the navigation capability of the physical map includes north, south, east, and west directional navigation through the virtual map.

8.   (Original) A computer implemented method as recited in claim 7 wherein the navigation capability of the physical map further includes a scalability feature allowing adjustment of the scalability of the physical map in order to provide a viewer of the display device views of the physical map having different magnifications.

9.   (Previously Presented) A computer implemented method as recited in claim 8 wherein the scalability feature is controlled according to tracked movements of the display device.

10.   (Original) A computer implemented method as recited in claim 8 wherein the scalability feature is controlled by user input separate from tracked movement of the display device.

11.   (Original) A computer implemented method as recited in claim 6 wherein the navigation capability of the physical map includes a scalability feature allowing adjustment of the scalability of the physical map in order to provide a viewer of the display device views of the physical map having different magnifications

12.   (Previously Presented) A computer implemented method as recited in claim 11 wherein the scalability feature is controlled according to tracked movements of the display device.

13.   (Previously Presented) A computer implemented method as recited in claim 11 wherein the scalability to feature is controlled by user input separate from tracked movements of the display device.

14.   (Original) A computer implemented method as recited in claim 1 wherein the display device and the computer system are formed in a single computer device provided to a user of the computer device.

15.   (Original) A computer implemented method as recited in claim 14 wherein the computer device is a hand-held computer device.

16.   (Original) A computer implemented method as recited in claim 15 wherein the hand-held computer device is a personal digital assistant (PDA).

17.   (Original) A computer implemented method as recited in claim 16 wherein the PDA has handwriting recognition capability.

18.   (Original) A computer implemented method as recited in claim 16 wherein the PDA has voice recognition capability.

19.   (Original) A computer implemented method as recited in claim 1 wherein the visual information generated by the computer system includes multiple application windows.

20.   (Original) A computer implemented method as recited in claim 19 wherein a first window of the multiple application windows corresponds to a first application executing upon the computer system.

21.   (Original) A computer implemented method as recited in claim 20 wherein the first application executing upon the computer system is a physical map application.

22.   (Original) A computer implemented method as recited in claim 21 wherein the physical map application enables navigation through a physical map via user movement of the display device.

23.   (Original) A computer implemented method as recited in claim 1 wherein the displayed certain portion or segment of the virtual desktop is adjusted in a manner related to the tracked movements of the display device in relation to a substantially planar surface.

24.   (Original) A computer implemented method as recited in claim 23 wherein a virtual magnification of the displayed certain portion is updated in response to a command entered into the computer system by a user of the computer system.

25.   (Original) A computer implemented method as recited in claim 24 wherein the display device and the computer system are formed in a single device provided to a user of the computer device.

26.   (Original) A computer implemented method as recited in claim 25 wherein the computer device is a hand held computer device.

27.   (Original) A computer implemented method as recited in claim 26 wherein the hand held computer device is a personal digital assistant (PDA).

28.   (Original) A computer implemented method as recited in claim 25, wherein the hand held computer device is coupled to a second computer.

29.   (Original) A computer implemented method as recited in claim 28, further comprising the

act of utilizing the hand held computer device to select information displayed on the second computer.

30.   (Original) A computer implemented method as recited in claim 22 further comprising the acts of:

    monitoring a real scene in real space and time;

    capturing images of the real scene; and

    displaying within a first window of the multiple application windows the captured images of the real scene.

31.   (Original) A computer implemented method as recited in claim 30 wherein a second window of the multiple application windows corresponds to an application program executing upon the computer system.

32.   (Previously Presented) A method for visually navigating a virtual map generated by a physical map application executing upon a hand-held computer system, the hand-held computer system having a display device and a motion sensor, comprising:

    transforming visual information generated by the physical map application into a virtual map suitable for display via the display device;

    displaying a certain portion of the virtual map via the display device;

    tracking translational movements of the hand-held computer system using the motion sensor; and

    updating the displayed certain portion of the virtual map in a manner correlated to the tracked movements of the hand-held computer system.

33.   (Previously Presented) A computer implemented method as recited in claim 32 further comprising the act of redefining the orientation of the certain portion displayed via the display device such that, without moving the hand-held computer system, the certain portion displayed via the display device changes.

34.   (Original) A computer implemented method as recited in claim 32 wherein the orientation of the certain portion displayed is redefined in response to a request by a user.

35.   (Previously Presented) A computer implemented method as recited in claim 32 wherein a virtual magnification of the displayed certain portion is updated in a manner correlated to the tracked movements of the hand-held computer system.

36.   (Original) A computer implemented method as recited in claim 32 wherein a virtual magnification of the displayed certain portion is updated in response to a command entered into

the computer system by a user of the hand-held computer system.

37.   (Original) A computer implemented method as recited in claim 32 wherein the physical map application is a first application executing upon the hand-held computer system.

38.   (Original) A computer implemented method as recited in claim 32 wherein the navigation capability of the physical map includes north, south, east, and west directional navigation through the virtual map.

39.   (Original) A computer implemented method as recited in claim 38 wherein the navigation capability of the physical map further includes a scalability feature allowing adjustment of the scalability of the physical map in order to provide a viewer of the display device views of the physical map having different magnifications.

40.   (Previously Presented) A computer implemented method as recited in claim 39 wherein the scalability feature is controlled according to tracked movements of the hand-held computer system.

41.   (Previously Presented) A computer implemented method as recited in claim 39 wherein the scalability feature is controlled by user input separate from tracked movements of the hand-held computer system.

42.   (Previously Presented) A computer implemented method as recited in claim 32 wherein the navigation capability of the physical map includes a scalability feature allowing adjustment of the scalability of the physical map in order to provide a viewer of the display device views of the physical map having different magnifications.

43.   (Previously Presented) A computer implemented method as recited in claim 42 wherein the scalability feature is controlled according to tracked movements of the hand-held computer system.

44.   (Previously Presented) A computer implemented method as recited in claim 42 wherein the scalability feature is controlled by user input separate from tracked movements of the hand-held computer system.

45.   (Original) A computer implemented method as recited in claim 32 wherein the hand-held computer system is a personal digital assistant (PDA).

46.   (Original) A computer implemented method as recited in claim 45 wherein the PDA has

voice recognition capability.

47.   (Previously Presented) A computer implemented method as recited in claim 32 wherein the displayed certain portion of the virtual desktop is adjusted in a manner related to the tracked movements of the display device in relation to a substantially planar surface.

48.   (Previously Presented) A computer implemented method as recited in claim 47 wherein a virtual magnification of the displayed certain portion is updated in response to a command entered into the computer system by a user of the hand-held computer system.

49.   (Previously Presented) A computer implemented method as recited in claim 48 wherein the display device and the computer system are formed in a single device provided to a user of the computer device.

50.   (Previously Presented) A computer implemented method as recited in claim 49 wherein the computer device is a hand-held computer device.

51.   (Original) A computer implemented method as recited in claim 45 wherein the PDA has handwriting recognition capability.

52.   (Previously Presented) A computer implemented method as recited in claim 50 wherein the hand-held computer device is a personal digital assistant (PDA).

53.   (Previously Presented) A computer implemented method as recited in claim 49, wherein the hand-held computer device is coupled to a second computer.

54.   (Previously Presented) A computer implemented method as recited in claim 53, further comprising the act of utilizing the hand-held computer device to select information displayed on the second computer.

55.   (Previously Presented) A hand-held computer system comprising:
        a digital processor;
        a motion sensor coupled to a display device;
        the display device coupled to the digital processor; and
        a computer readable medium coupled to the digital processor, the computer readable medium having computer executable instructions for:
mapping visual information generated by the hand-held computer system into a virtual desktop
        suitable for display via the display device;
displaying a certain portion of the virtual desktop via the display device;

tracking translational movements of the hand-held computer system via the motion sensor; and updating the displayed certain portion of the virtual desktop in a manner correlated to the tracked movements of the hand-held computer system.

56.   (Previously Presented) A hand held computer system as recited in claim 55 wherein the computer readable medium further comprises computer executable instructions for redefining the orientation of the certain portion displayed via the display device such that, without moving the display device, the displayed certain portion via the display device changes.

57.   (Previously Presented) A hand held computer system as recited in claim 56 wherein the orientation of the displayed certain portion is redefined in response to a request by a user.

58.   (Previously Presented) A hand held computer system as recited in claim 55 wherein the computer readable medium further comprises computer executable instructions for updating a virtual magnification of the displayed certain portion in a manner correlated to the tracked movements of the display device.

59.   (Previously Presented) A hand held computer system as recited in claim 55 wherein the computer readable medium further comprises computer executable instructions for updating a virtual magnification of the displayed certain portion in response to a command entered into the computer system by a user of the hand-held computer system.

60.   (Original) A hand held computer system as recited in claim 55 wherein the computer readable medium further comprises computer executable instructions for a physical map application providing a virtual map, the movement of the display device enabling visual navigation through the virtual map.

61.   (Original) A hand held computer system as recited in claim 60 wherein the navigation capability of the physical map includes north, south, east, and west directional navigation through the virtual map.

62.   (Original) A hand held computer system as recited in claim 61 wherein the navigation capability of the physical map further includes a scalability feature allowing adjustment of the scalability of the physical map in order to provide a viewer of the display device views of the physical map having different magnifications.

63.   (Previously Presented) A hand held computer system as recited in claim 62 wherein the scalability feature is controlled according to tracked movements of the display device.

64. (Previously Presented) A hand held computer system as recited in claim 62 wherein the scalability feature is controlled by user input separate from tracked movements of the display device.

65. (Previously Presented) A hand held computer system as recited in claim 60 wherein the navigation capability of the physical map includes a scalability feature allowing adjustment of the scalability of the physical map in order to provide a viewer of the display device views of the physical map having different magnifications.

66. (Previously Presented) A hand held computer system as recited in claim 65 wherein the scalability feature is controlled according to tracked movements of the display device.

67. (Previously Presented) A hand held computer system as recited in claim 65 wherein the scalability feature is controlled by user input separate from tracked movements of the display device.

68. (Original) A hand held computer system as recited in claim 55 wherein the hand-held computer system is a personal digital assistant (PDA).

69. (Original) A hand held computer system as recited in claim 68 wherein the PDA has handwriting recognition capability.

70. (Original) A hand held computer system as recited in claim 68 wherein the PDA has voice recognition capability.

71. (Previously Presented) A hand held computer system as recited in claim 55 wherein the visual information generated by the hand-held computer system includes multiple application windows.

72. (Previously Presented) A hand held computer system as recited in claim 71 wherein a first window of the multiple application windows corresponds to a first application executing upon the hand-held computer system.

73. (Original) A hand held computer system as recited in claim 72 wherein the first application executing upon the computer system is a physical map application.

74. (Original) A hand held computer system as recited in claim 73 wherein the physical map application enables navigation through a physical map via user movement of the display device.

75. (Original) A hand held computer system as recited in claim 55 wherein the displayed certain portion of the virtual desktop is adjusted in a manner related to the tracked movements of the display device in relation to a substantially planar surface.

76. (Previously Presented) A hand held computer system as recited in claim 75 wherein the computer readable medium further comprises computer executable instructions for updating a virtual magnification of the displayed certain portion is updated in response to a command entered into the computer system by a user of the hand-held computer system.

77. (Previously Presented) A hand held computer system as recited in claim 76 wherein the display device and the hand-held computer system are formed in a single device provided to a user of the computer device.

78. (Original) A hand held computer system as recited in claim 77 wherein the computer device is a hand held computer device.

79. (Original) A hand held computer system as recited in claim 78 wherein the hand held computer device is a personal digital assistant (PDA).

80. (Previously Presented) A hand held computer system as recited in claim 78, wherein the hand held computer device is coupled to a second computer.

81. (Original) A hand held computer system as recited in claim 80, wherein the hand held computer device is utilized to select information displayed on the second computer.

82. (Original) A hand held computer system as recited in claim 74 wherein the computer readable medium further comprises computer executable instructions for:
   monitoring a real scene in real space and time;
   capturing images of the real scene; and
   displaying within a first window of the multiple application windows the captured images of the real scene.

83. (Previously Presented) A hand-held computer system comprising:
   a digital processor;
   a motion sensor coupled to a display device;
   the display device coupled to the digital processor; and
   a computer readable medium coupled to the digital processor, the computer readable medium having computer executable instructions for:
   a physical map application;

transforming visual information generated by the physical map application into a virtual map suitable for display via the display device;

displaying a certain portion of the virtual map via the display device;

tracking translational movements of the hand-held computer system using the motion sensor; and

updating the displayed certain portion of the virtual map in a manner correlated to the tracked movements of the hand-held computer system.

84.   (Previously Presented) A hand held computer system as recited in claim 83 wherein the computer readable medium further comprises computer executable instructions for redefining the orientation of the displayed certain portion via the display device such that, without moving the hand-held computer system, the displayed certain portion via the display device changes.

85.   (Original) A hand held computer system as recited in claim 84 wherein the orientation of the certain portion displayed is redefined in response to a request by a user.

86.   (Previously Presented) A hand held computer system as recited in claim 83 wherein the computer readable medium further comprises computer executable instructions for updating a virtual magnification of the displayed certain portion in a manner correlated to the tracked movements of the hand-held computer system.

87.   (Original) A hand held computer system as recited in claim 83 wherein the computer readable medium further comprises computer executable instructions for updating a virtual magnification of the displayed certain portion in response to a command entered into the computer system by a user of the hand-held computer system.

88.   (Original) A hand held computer system as recited in claim 83 wherein the physical map application is a first application executing upon the hand-held computer system.

89.   (Previously Presented) A hand held computer system as recited in claim 83 wherein the computer readable medium further comprises computer executable instructions for navigating the physical map wherein the navigation capability of the physical map includes north, south, east, and west directional navigation through the virtual map.

90.   (Original) A hand held computer system as recited in claim 89 wherein the navigation capability of the physical map further includes a scalability feature allowing adjustment of the scalability of the physical map in order to provide a viewer of the display device views of the physical map having different magnifications.

91.　(Previously Presented) A hand held computer system as recited in claim 90 wherein the scalability feature is controlled according to tracked movements of the hand-held computer system.

92.　(Previously Presented) A hand held computer system as recited in claim 90 wherein the scalability feature is controlled by user input separate from tracked movements of the hand-held computer system.

93.　(Previously Presented) A hand held computer system as recited in claim 83 wherein the computer readable medium further comprises computer executable instructions for navigating the physical map wherein the navigation capability of the physical map includes a scalability feature allowing adjustment of the scalability of the physical map in order to provide a viewer of the display device views of the physical map having different magnifications.

94.　(Previously Presented) A hand held computer system as recited in claim 93 wherein the scalability feature is controlled according to tracked movements of the hand-held computer system.

95.　(Previously Presented) A hand held computer system as recited in claim 93 wherein the scalability feature is controlled by user input separate from tracked movements of the hand-held computer system.

96.　(Original) A hand held computer system as recited in claim 83 wherein the hand-held computer system is a personal digital assistant (PDA).

97.　(Original) A hand held computer system as recited in claim 96 wherein the PDA has handwriting recognition capability.

98.　(Original) A hand held computer system as recited in claim 96 wherein the PDA has voice recognition capability.

99.　(Previously Presented) A hand-held computer system comprising:

　　a digital processor;

　　a motion sensor coupled to the digital processor, the motion sensor capable of sensing motion relative to a substantially planar surface;

　　a display device coupled to the digital processor; and

　　a computer readable medium coupled to the digital processor, the computer readable medium having computer executable instructions for:

mapping visual information generated by the hand-held computer system into a virtual desktop suitable for display via the display device;

displaying a certain portion of the virtual desktop via the display device;

tracking translational movements of the hand-held computer system via the motion sensor; and

updating the displayed certain portion of the virtual desktop in a manner correlated to the tracked movements of the hand-held computer system in relation to a substantially planar surface.